



## MAY 2 3 2016

Ms. Theresa Geijer Equilon Enterprises LLC 2555 13<sup>th</sup> Ave SW Seattle, WA 98134

Re: Proposed Authority to Construct/Certificate of Conformity (Minor Mod)

District Facility # N-758 Project # N-1161376

Dear Ms. Geijer:

Enclosed for your review is the District's analysis of an application for Authority to Construct for the facility identified above. You requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The proposed project is to install a spare blower, manifold discharge from each carbon column into a shared discharge stack, and relocate sampling probe into the shared discharge stack for the vapor recovery system under permit N-758-13, at 3515 Navy Drive, Stockton, California.

After addressing all comments made during the 45-day EPA comment period, the District intends to issue the Authority to Construct with a Certificate of Conformity. Prior to operating with modifications authorized by the Authority to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

If you have any questions, please contact Mr. Nick Peirce, Permit Services Manager, at (209) 557-6400.

Thank you for your cooperation in this matter.

Sincerely,

Arnaud Marjollet

Director of Permit Services

**Enclosures** 

cc: Gerardo C. Rios, EPA (w/enclosure) via email

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Executive Director/Air Pollution Control Officer

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# San Joaquin Valley Air Pollution Control District **Authority to Construct Application Review**

Facility Name: Equilon Enterprises LLC

Date: May 12, 2016

Mailing Address:

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Seattle, WA 98134

Lead Engineer: Nick Peirce

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Application #(s): N-758-13-10

Project #: N-1161376

Deemed Complete: April 27, 2016

#### l. Proposal

The applicant has proposed the following modifications to the vapor recovery system (i.e., bladder tank and carbon adsorber system) serving the loading racks at a bulk fuel loading terminal:

1. Install a spare blower motor for the vapor recovery system,

Vapors displaced during truck loading operation are routed to a bladder inside a tank. When the bladder reaches a certain height, the collected vapors discharge into a carbon adsorption system with the help of a blower. If the blower motor malfunctions the carbon adsorber system shuts down and fuel loading into the trucks must stop. The spare blower motor would help eliminate downtime of the carbon adsorber system and consequently, eliminate the fuel loading downtime. The spare blower motor would operate only when the primary blower motor is not operating.

2. Connect outlet of each carbon column into a common stack that discharges into the atmosphere.

The carbon adsorber system contains two carbon columns. Vapors are adsorbed onto one of the columns while the other column desorbs the vapors as it is being regenerated. The system alternates between the two columns on a 15-minute cycle, regenerating one carbon column while the other collects vapors. The condensed vapors are returned to a tank for re-use. Currently, each carbon column has its own discharge stack. The applicant is proposing to connect outlet from each carbon column to a common single discharge stack.

3. Relocate continuous monitoring system (CMS) sampling probe into the common exhaust stack (item 2 above).

Currently, each carbon column is equipped with a sampling probe which is connected to a CMS. The applicant has proposed to relocate a sampling probe in the common exhaust and connect it to the CMS.

This facility possesses a Title V permit. This project is a "Minor Modification" to the Title V permit per section 3.20 of Rule 2520. The applicant has requested to issue the Authority to Construct (ATC) permit with Certificate of Conformity (COC), which is EPA's 45-day review of the draft permits prior to the issuance of the final ATC permits.

#### II. Applicable Rules

Rule 2201	New and Modified Stationary Source Review Rule (2/18/16)
Rule 2520	Federally Mandated Operating Permits (6/21/01)
Rule 4001	New Source Performance Standards (4/14/99)
Rule 4002	National Emission Standards for Hazardous Air Pollutants (5/20/04)
Rule 4101	Visible Emissions (2/17/05)
Rule 4102	Nuisance (12/17/92)
Rule 4624	Transfer of Organic Liquid (12/20/07)
California Hea	alth and Safety Code 41700 (Public Nuisance)
California Hea	alth and Safety Code 42301.6 (School Notice)
Public Resour	rces Code 21000-21177: California Environmental Quality Act (CEQA)
California Cod	de of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-
15387: CEQA	. Guidelines

#### III. Project Location

This facility is located at 3515 Navy Dr. Stockton, California.

## IV. Process Description

This facility is a bulk distribution terminal. Gasoline, diesel, and denatured ethanol are delivered to the facility by pipeline and trucks for bulk storage. As required by customer demand, organic liquids are loaded from the bulk storage tanks into tanker trucks for delivery to various retail gasoline stations and other gasoline fueling facilities.

## V. Equipment Listing

N-758-13-10: ONE JOHN ZINK VAPOR RECOVERY SYSTEM, CARBON ADSORPTION UNIT, MODEL #AA1218715B AND VAPOR BLADDER TANK #16 IN THE VAPOR RECOVERY LINE BEFORE THE VAPOR RECOVERY SYSTEM.

# VI. Emission Control Technology Evaluation

The carbon adsorber system is expected to reduce at least 99% of the VOC emissions. The proposed project is not expected to adversely affect the control efficiency of the system.

## VII. General Calculations

### A. Assumptions

Assumptions will be stated, as they are made.

#### **B.** Emission Factors

1. Pre-Project Emission Factors (EF1)

N-758-13-9

Process:

Per PTO N-758-13-9,

EF1 = 0.08 lb-VOC/1,000 gallon of organic liquid loaded

Other components:

Fugitive VOC emissions from valves, flanges, compressor seals etc. will be determined using CAPCOA 's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities", Table IV-1b (Feb 1999) - Marketing Terminal. Total hydrocarbons (THC) reported in Table IV-1b are all assumed to be VOC.

	_	VOC Emission Factor
Component Type	Source Type	lb/hr/source
<del>and to be transported to the second of the </del>	Gas	2.87E-05
Valves	Light Liquid	9.48E-05
	Gas	1.43E-04
Pump Seals	Light Liquid	1.19E-03
Others (compressors	Gas	2.65E-04
and others)	Light Liquid	2.87E-04
Fittings (connectors	Gas	9.26E-05
and flanges)	Light Liquid	1.76E-05

# 2. Post-Project Emission Factors (EF2)

N-758-13-10

EF2 will be same as EF1.

#### C. Calculations

## 1. Pre-Project Potential to Emit (PE1)

#### N-758-13-9

Process:

This PTO limits the daily and annual throughput rates to 895,000 gallons and 196,000,000 gallons, respectively. Therefore,

PE1 = (0.08 lb-VOC/1,000 gal of organic liquid loaded)(895,000 gal/day) = 71.6 lb-VOC/day

= (0.08 lb-VOC/1,000 gal of organic liquid loaded)(196,000,000 gal/yr) = 15,680 lb-VOC/yr

## Other components:

The permit also limits fugitive VOC emissions to 9,362 lb-VOC/yr.

## Summary:

PE2<sub>Total</sub> = 71.6 lb-VOC/day + (9,362/365) lb-VOC/day = 97.2 lb-VOC/day = 15,680 lb-VOC/yr + 9,362 lb-VOC/yr = 25,042 lb-VOC/vr

## 2. Post Project Potential to Emit (PE2)

#### N-758-13-10

Process:

The applicant is not proposing any changes to the emission factor and process rates; therefore, PE2 will be same as PE1.

PE1 = 71.6 lb-VOC/day; 15,680 lb-VOC/yr

#### Other components:

Due to the proposed project, there will additional valves and flanges in the system. Fugitive component emissions are estimated using the following equations and are summarized in the following table.

PE2 = VOC (lb/hr/source) × component count × 24 hr/day = VOC (lb/hr/source) × component count × 8,760 hr/yr

Component Type	Saurea Tuna	VOC	Component	PE	2
Component Type	Source Type	lb/hr/source	Count	lb/day	lb/yr
Valves	Gas	2.87E-05	15	0.01	4
Vaives	Light Liquid	9.48E-05	0	0.00	0
Pump Seals	Gas	1.43E-04	0	0.00	0
Fullip Seals	Light Liquid	1.19E-03	0	0.00	0
Others	Gas	2.65E-04	0	0.00	0
(compressors and others)	Light Liquid	2.87E-04	0	0.00	0
Fittings	Gas	9.26E-05	60	0.13	49
(connectors and flanges)	Light Liquid	1.76E-05	0	0.00	O
			Total:	0.14	53

Total fugitive emissions would be:

= 25.8 lb-VOC/day

= 9,415 lb-VOC/yr

## Summary:

$$PE2_{Total} = 71.6 \text{ lb-VOC/day} + 25.7 \text{ lb-VOC/day} = 97.3 \text{ lb-VOC/day}$$

= 25,095 lb-VOC/yr

## 3. Pre-Project Stationary Source Potential to Emit (SSPE1)

Pursuant to Section 4.9 of District Rule 2201, the Pre-Project Stationary Source Potential to Emit (SSPE1) is the Potential to Emit (PE) from all emission units with valid ATCs or PTOs at the Stationary Source and the quantity of Emission Reduction Credits (ERCs) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

Except for the permit units in this project, the potential emissions for each permit unit are taken from the application review of project N-1152727.

	SS	SPE1 (lb/)	/r)		
Permit #	NO <sub>x</sub>	SOx	PM <sub>10</sub>	CO	VOC
N-758-1-1	0	0	0	0	297
N-758-2-1	0	0	0	0	353
N-758-3-4 and '-7-4	0	0	0	0	26,600
N-758-4-5	0	0	0	0	2,768
N-758-5-5	0	0	0	0	3,742
N-758-6-2	0	0	0	0	6,583
N-758-9-1	0	0	0	0	0
N-758-10-2	0	0	0	0	0
N-758-11-3	0	0	0	0	329
N-758-13-9	0	0	0	0	25,042
N-758-14-5	0	0	0	0	6,762
N-758-15-1	0	0	0	0	9
N-758-16-0	0	0	0	0	1,804
ERC	0	0	0	0	0
Total	0	0	0	0	74,289

# 4. Post-Project Stationary Source Potential to Emit (SSPE2)

Pursuant to Section 4.10 of District Rule 2201, the Post Project Stationary Source Potential to Emit (SSPE2) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

	SS	SPE2 (lb/y	r)	***************************************	
Permit #	NO <sub>x</sub>	SOx	PM <sub>10</sub>	CO	VOC
N-758-1-1	0	0	0	0	297
N-758-2-1	0	0	0	0	353
N-758-3-4 and '-7-4	0	0	0	0	26,600
N-758-4-5	0	0	0	0	2,768
N-758-5-5	0	0	0	0	3,742
N-758-6-2	0	0	0	0	6,583
N-758-9-1	0	0	0	0	0
N-758-10-2	0	0	0	0	0
N-758-11-3	0	0	0	0	329
N-758-13-10	0	0	0	0	25,095
N-758-14-5	0	0	0	0	6,762
N-758-15-1	0	0	0	0	9
N-758-16-0	0	0	0	0	1,804
ERC	0	0	0	0	0
Total	0	0	0	0	74,342

## 5. Major Source Determination

#### Rule 2201 Major Source Determination

Pursuant to District Rule 2201, a Major Source is a stationary source with a SSPE2 equal to or exceeding one or more of the following threshold values. For the purposes of determining major source status the following shall not be included:

- Any ERCs associated with the stationary source
- Emissions from non-road IC engines (i.e. IC engines at a particular site at the facility for less than 12 months)
- Fugitive emissions, except for the specific source categories specified in 40 CFR Part 70.2

This facility operates bulk terminal where organic liquids (gasoline, diesel, denatured ethanol, etc.) are stored and loaded to tanker trucks to be distributed to the nearby gasoline dispensing facilities. This operation is subject to various NSPS (40 CFR Part 60) and NEHAPS (40 CFR Part 63). Therefore, fugitive emissions are included in the SSPE balance for Major source determination purpose.

Rule 2201 I	Vajor Sou	rce Determ	ination (lb/	/ear)	
Category	NOx	SO <sub>X</sub>	PM <sub>10</sub>	CO	VOC
SSPE1	0	0	0	0	74,289
SSPE2	.0	0	0	0	74,342
Major Source Thresholds	20,000	140,000	140,000	200,000	20,000
Major Source?	No	No	No	No	Yes

From the above table, it is determined that this facility is an existing Major Source and will remain Major Source for VOC emissions after the proposed project.

## Rule 2410 Major Source Determination

The total gasoline storage capacity at this site is less than 300,000 barrels. Therefore, this facility is not one of the source categories specified in 40 CFR 52.21 (b)(1)(iii). Therefore the following PSD Major Source thresholds are applicable.

PSD Major S	ource [	Determi	nation	(tons/y	ear)	
Category	NO2	VOC	SO <sub>2</sub>	CO	PM	PM <sub>10</sub>
Estimated Facility PE before Project Increase	0.0	37.1	0.0	0.0	0.0	0.0
PSD Major Source Thresholds	250	250	250	250	250	250
PSD Major Source?	No	No	No	No	No	No

## 6. Baseline Emissions (BE)

The BE calculation (in lb/year) is performed on a pollutant-by-pollutant basis for each unit within the project to calculate the quarterly net emissions change, and if applicable, to determine the amount of offsets required.

Pursuant to District Rule 2201, BE is equal to pre-project Potential to Emit (PE1) for:

- · Any unit located at a non-Major Source,
- · Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source.

Otherwise.

BE = Historic Actual Emissions (HAE), calculated pursuant to District Rule 2201.

Section 3.13 of Rule 2201 defines Clean Emission Unit as an emission unit that meets one of the following criteria:

- The unit is equipped with an emissions control technology with a minimum control efficiency of at least 95% (or at least 85% for lean-burn, internal combustion engines); or
- The unit is equipped with emission control technology that meets the requirements for achieved-in-practice (AIP) BACT as accepted by the APCO during the five years immediately prior to the submission of the complete application.

#### N-758-13

Process:

The loading racks are served by the vapor recovery system under this permit. These units are clean emissions units as they comply with the achieved-in-practice BACT, which is bottom loading of trucks and use of control equipment capable of reducing at least 99% of VOC emissions. Therefore, these units are Clean Emission Units and the BE is set equal to PE1.

### Other components:

The applicant is proposing any changes to the existing components; therefore, BE calculations are not required. However, for new components, BE is equal to 0.

## 7. SB-288 Major Modification

SB 288 Major Modification is defined in 40 CFR Part 51.165 as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act."

The proposed project results in an increase in fugitive emissions solely due to additional valves, flanges and connectors, etc. The emissions increase due to additional new components is below 0.5 lb/day, which is rounded to zero to be consistent with the guidance in District's Policy APR-1130 (1/14/15) "Increases in Maximum Daily Permitted Emissions of Less than or Equal to 0.5 lb/day" and District's draft policy "Implementation of Rule 2201 (as amended on 12/18/08 and effective on 6/10/10) for SB288 and Federal Major Modifications" (2/8/11). Therefore, this project does not trigger an SB-288 modification.

#### 8. Federal Major Modification

District Rule 2201 states that a Federal Major Modification is the same as a "Major Modification" as defined in 40 CFR 51.165 and part D of Title I of the CAA.

The proposed project results in an increase in fugitive emissions solely due to additional valves, flanges and connectors, etc. The emissions increase due to additional new components is below 0.5 lb/day, which is rounded to zero to be consistent with the guidance in District's Policy APR-1130 (1/14/15) "Increases in Maximum Daily Permitted Emissions of Less than or Equal to 0.5 lb/day" and District's draft policy "Implementation of Rule 2201 (as amended on 12/18/08 and effective on 6/10/10) for SB288 and Federal Major Modifications" (2/8/11). Therefore, this project does not trigger a Federal Major modification.

# 9. Rule 2410 – Prevention of Significant Deterioration (PSD) Applicability Determination

Rule 2410 applies to any pollutant regulated under the Clean Air Act, except those for which the District has been classified nonattainment.

Per section VII.C.5 of this document, this facility is not an existing Major Source under PSD.

## I. Project Emissions Increase - New Major Source Determination

The post-project potentials to emit from all new and modified units are compared to the PSD major source thresholds to determine if the project constitutes a new major source subject to PSD requirements.

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(iii). Therefore, the following PSD Major Source thresholds are applicable.

	Potenti	al to Emi	t (tons/yea	ır)		managan kangan ang panggapan a
Category	NO <sub>2</sub>	VOC	SO2	CO	РМ	PM10
Total potential from N- 758-13-10 (non- fugitive)	0.0	7.8	0.0	0.0	0.0	0.0
PSD Major Source threshold	250	250	250	250	250	250
New PSD Major Source?	No	No	No	No	No	No

As shown in the table above, the project's non-fugitive potential to emit, by itself, does not exceed any of the PSD major source thresholds. Therefore, Rule 2410 is not applicable and no further analysis is required.

## 10. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. Detailed QNEC calculations are included in Appendix V.

## VIII. Compliance Determination

## Rule 2201 New and Modified Stationary Source Review Rule

## A. Best Available Control Technology (BACT)

## 1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis. Unless specifically exempted by Rule 2201, BACT shall be required for the following actions\*:

- Any new emissions unit with a potential to emit exceeding two pounds per day,
- b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
- c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day, and/or
- d. Any new or modified emissions unit, in a stationary source project, which results in an SB 288 Major Modification or a Federal Major Modification, as defined by the rule.

\*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

The BACT requirements for each unit are evaluated in the following section:

a. New emissions units -PE2 > 2.0 lb/day

#### Other components:

Per section VII.C.2 of this document, PE2 is not greater than 2.0 lb/day from any new valve or flange that will be installed as part of this project. Therefore, BACT is not triggered from any new component.

b. Relocation of emission units - PE2 > 2.0 lb/day

None of the emission units under this project is being relocated; therefore, no further discussion is required.

c. Modification of emission units - AIPE > 2.0 lb/day

AIPE is calculated using the equations mentioned in Section 4.3 and 4.4 of Rule 2201.

$$AIPE = PE2 - \left(\frac{EF2}{EF1}\right)(PE1)$$

#### Process:

The applicant is not proposing any changes to the emission factor or processing rates. Thus, AIPE will be zero.

#### Other components:

The applicant is not proposing any changes to the emission factors for existing valves, flanges, connectors, etc. Further, there is no increase in emissions. Therefore, AIPE will be zero.

d. SB-288/Federal Major Modification

Per sections VII.C.7 and VII.C.8 above, this project is not an SB 288 and/or Federal Major Modification for any pollutant. Thus, BACT is not triggered for any pollutant under this section.

#### B. Offsets

### 1. Offset Applicability

Offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals to or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

The proposed project results in an increase in fugitive emissions solely due to additional valves, flanges and connectors, etc. The emissions increase due to additional new components is below 0.5 lb/day, which is rounded to zero to be consistent with the guidance in District's Policy APR-1130 (1/14/15) "Increases in Maximum Daily Permitted Emissions of Less than or Equal to 0.5 lb/day". Therefore, no offsets are required for this project.

#### C. Public Notification

#### 1. Applicability

Public noticing is required for:

- a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications
- b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant
- Modifications that increase SSPE1 from a level below the emission offset threshold to a level exceeding the emissions offset threshold for one or more pollutants
- d. New stationary sources with SSPE2 exceeding the emissions offset threshold level for one or more pollutants
- e. Any permitting action resulting in an SSIPE of greater than 20,000 lb/year for any one pollutant
- f. Any project which results in a Title V significant permit modification.

Detailed discussion on each of the above items is presented in the following section:

a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications

New Major Sources are new facilities, which are also Major Sources. Since this facility is not a new facility, public noticing is not required for this project.

As demonstrated in sections VII.C.7 and VII.C.8 of this document, this project is not an SB-288 or Federal Major Modification; therefore, public notice is not required.

## b. PE > 100 lb/day

Applications which include a new emissions unit with a PE greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements.

The potential emissions due to any new component are not greater than 100 lb/day. Therefore, public notice is not required.

#### c. Offset Threshold

The SSPE1 and SSPE2 are compared to the offset thresholds in the following table.

	Offset Thresholds							
Pollutant	SSPE1 (lb/yr)	SSPE2 (lb/yr)	Offset Threshold (lb/yr)	Public Notice Required?				
NOx	0	0	20,000	No				
SOx	0	0	54,750	No				
PM <sub>10</sub>	0	0	29,200	No				
CO	0	0	200,000	No				
VOC	74,289	74,342	20,000	No				

As detailed above, the proposed project does not result in an increase in SSPE1 from a level below the emission offset threshold to a level exceeding the emissions offset threshold for any pollutant; therefore, public notice is not required.

## d. New Stationary Source with SSPE2 exceeding Offset Threshold

This facility is not a new stationary source. Therefore, public notice will not trigger under this section.

## e. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a SSIPE of more than 20,000 lb/year of any affected pollutant. The District practice is to define SSIPE as the difference between SSPE2 and SSPE1. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table. Note that negative SSIPE values are equated to zero.

***************************************	SSIPE Public Notice						
Pollutant	SSPE2 (lb/yr)	SSPE1 (lb/yr)	SSIPE (lb/yr)	SSIPE Public Notice Threshold (lb/yr)	Public Notice Required?		
NOx	0	0	0	20,000	No		
SOx	0	0	0	20,000	No		
PM <sub>10</sub>	0	0	0	20,000	No		
CO	0	0	0	20,000	No		
VOC	74,342	74,289	53	20,000	No		

As demonstrated above, SSIPE value for each pollutant is less than 20,000 lb/year; therefore, public notice is not required.

## f. Title V Significant Permit Modification

The proposed project is a minor modification per section 3.20 of Rule 2520; therefore, public notice is not required for this project.

#### 2. Public Notice Action

As discussed above, this project will not result in emissions, for any pollutant, which would subject the project to any of the noticing requirements listed above. Therefore, public notice will not be required for this project.

#### D. Daily Emission Limits

DELs and other enforceable conditions are required by Rule 2201 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. The DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT. The following DELs will be included in the permit:

#### N-758-13-10 Process:

- The facility shall be equipped with bottom loading and a vapor collection and control system such that the VOC emissions shall not exceed 0.08 pounds per 1,000 gallons of organic liquid loaded. [District Rules 2201 and 4624]
- The John Zink vapor processing unit is authorized to handle gasoline vapors from a total of no more than 895,000 gallons of gasoline throughput per day, nor 196,000,000 gallons of gasoline throughput in a 12 consecutive month rolling period. [District Rules 2201 and 4624]

## Other components:

 Fugitive VOC emissions from unit shall not exceed 25.8<sup>1</sup> pounds per day or 9,415 pounds per year. [District Rule 2201]

<sup>&</sup>lt;sup>1</sup>9,415 lb-VOC/yr ÷ 365 days/yr = 25.8 lb-VOC/day

## E. Compliance Assurance

### 1. Source Testing

The potential emissions are determined using established emissions factors or generally accepted emission factors; therefore, source testing is not required.

## 2. Monitoring

Currently, the applicant uses a CMS to continuously monitor VOC emissions. The monitoring requirements associated with the system will be reinstated in the permit. No additional monitoring is required under Rule 2201.

## 3. Recordkeeping

The existing recordkeeping requirements will be replicated in the permit.

## 4. Reporting

The existing reporting requirements will be replicated in the permit.

Compliance is expected with this Rule.

## Rule 2410 Prevention of Significant Deterioration

As discussed in section VII.C.9 of this document, this project does not result in a new PSD major source or PSD major modification. No further discussion is required.

## Rule 2520 Federally Mandated Operating Permits

This facility is subject to this Rule, and has received their Title V Operating Permit. The proposed modification is a Minor Modification to the Title V Permit, as the project is not an SB-288 or Federal Major Modification and the applicant is not proposing to relax any existing monitoring, recordkeeping or reporting requirements.

In accordance with Rule 2520, these modifications:

- 1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
- 2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions:
- 3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;

- 4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
  - A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
  - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
- 5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
- 6. Do not seek to consolidate overlapping applicable requirements.

As discussed above, the facility has applied for a Certificate of Conformity (COC). Therefore, the facility must apply to modify their Title V permit with an administrative amendment, prior to operating with the proposed modifications. Continued compliance with this rule is expected. The facility may construct/operate under the ATC upon submittal of the Title V administrative amendment application.

#### Rule 4001 New Source Performance Standards

40 CFR Part 60 Subpart XX - Standards of Performance for Bulk Gasoline Terminals

This subpart is applicable to all of the loading racks at a bulk gasoline terminal which deliver liquid product into gasoline tank trucks and that commenced construction or modification after December 17, 1980.

The loading racks are covered under separate permits N-758-9 and '-10, which are not being modified as part of this project. Therefore, no further discussion is required.

#### Rule 4002 National Emission Standards for Hazardous Air Pollutants

40 CFR Part 63 Subpart R – Gasoline Distribution Facilities (Bulk Gasoline terminals and Pipeline Breakout Stations

The potential Hazardous Air Pollutants (HAP) emissions from this facility are less than 10 tons/yr for single HAP and 25 tons/yr for combined HAPs<sup>2</sup>. Therefore, this facility is not becoming subject to the requirements of this subpart.

40 CFR Part 63 Subpart BBBBBB – Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities

<sup>&</sup>lt;sup>2</sup>Per EPA's document, Gasoline Distribution Industry (Stage I) – Background Information for Proposed Standards, EPA-453/R-97-002a, Table 3.1, total HAPs to VOC ratio is 11% (by weight). The total VOC from this facility will be 74,342 lb/yr after the proposed project. This means, the amount of HAPs will be 8,172 lb/yr (4.09 tons/yr), which is less than the 25 tons/yr threshold for combined HAPs. Since the combined HAPs are less than 10 tons/yr, the individual HAP must be less than 10 tons/yr.

This subpart establishes emission limitations and management practices for HAPs emitted from "area source" (i.e., not a Major HAP source) gasoline distribution bulk terminals, bulk plants and pipeline facilities.

§63.11081: Applicability

This subpart applies to each area source bulk gasoline terminal, pipeline breakout station, pipeline pumping station, and bulk gasoline plant identified below:

- A bulk gasoline terminal that is not subject to the control requirements of 40 CFR Part 63 Subpart R or 40 CFR Part 63, Subpart CC.
- 2. A pipeline breakout station that is subject to the control requirements of 40 CFR Part 63 Subpart R.
- 3. A pipeline pumping station
- 4. A bulk gasoline plant

This terminal is not subject to 40 CFR Part 63 Subpart R (as determined above). Also, the terminal is not a part of petroleum refining process and is therefore not subject to 40 CFR Part 63, Subpart CC - National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries. This facility is a bulk gasoline terminal (defined in 63.11100), and is an "area source" for HAP; therefore, it is subject to the requirements of this subpart.

## §63.11082: Affected Sources

The emission sources to which this subpart applies are gasoline storage tanks, gasoline loading racks, vapor collection-equipped gasoline cargo tanks, and equipment components in vapor or liquid gasoline service that meet the criteria specified in Table 1 through 3 to this subpart.

This gasoline terminal has the emissions units listed above paragraph. Therefore, these units are required to comply with this subpart.

Note that the latest revision to some sections of this subpart occurred on January 24, 2011. The District has conducted detailed analysis of this subpart under "Initial TV" project N-1111745 on February 7, 2013, and ensured that each permit at this facility including permit N-758-13 has all applicable requirements to ensure on-going compliance with this subpart. These requirements will be replicated in ATC N-758-13-10. Therefore, continued compliance is expected with this subpart.

## Rule 4101 Visible Emissions

Section 5.0, indicates that no air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour, which is dark or darker than Ringlemann 1 or equivalent to 20% opacity.

Condition #22 in the facility-wide permit N-758-0-2 enforces continued compliance with the requirements of this rule. Therefore, no additional condition is necessary.

#### Rule 4102 Nuisance

Section 4.0 prohibits discharge of air contaminants, which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations provided the equipment is well maintained. Therefore, compliance with this rule is expected. Condition #41 in the facility-wide permit N-758-0-2 enforces continued compliance with the requirements of this rule. Therefore, no additional condition is necessary.

## California Health & Safety Code 41700

District Policy APR 1905 – Risk Management Policy for Permitting New and Modified Sources specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite. The risk management review (RMR) results due to increase in fugitive emissions are summarized in the following table:

RMR Summary						
Categories	Vapor Recovery (Unit 13-10)	Project Totals	Facility Totals			
Prioritization Score	0.04	<1.0	>1.0			
Acute Hazard Index	0.00	0.00	0.00			
Chronic Hazard Index	0.00	0.00	0.00			
Maximum Individual Cancer Risk (10 <sup>-6</sup> )	1,20E-08	1.20E-08	1.20E-08			
T-BACT Required?	No	se nervertingerar s	va valganja ja ja pagasa na v			
Special Permit Conditions?	No		es es offacilità de es de la collègique es de la composition			

The acute and chronic indices are below 1.0, and the cancer risk factor associated with the project is less than 1.0 in a million. In accordance with the District's Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).

Compliance is expected with this Rule.

### Rule 4624 Transfer of Organic Liquid

This rule was amended on December 20, 2007. The District has conducted detailed analysis of this rule under "Initial TV" project N-1111745 on February 7, 2013, and ensured that permits for the emissions units subject to this rule (N-758-13) contains all applicable requirements. These requirements will be replicated in ATC N-758-13-10 associated with this project. Therefore, continued compliance is expected with this rule.

## California Health & Safety Code 42301.6 (School Notice)

The District has verified that this site is not located within 1,000 feet of any K-12 school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

## California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The San Joaquin Valley Unified Air Pollution Control District (District) adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
- Identify the ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

The District performed an Engineering Evaluation (this document) for the proposed project and determined that the proposed modifications did not trigger Best Available Control Technology (BACT) requirements. Furthermore, the District concludes that potential health impacts are less than significant from the proposed emission units. Therefore, this project does not require discretionary judgment or deliberation. Consequently, this permitting action constitutes a ministerial approval. Section 21080 of the Public Resources Code exempts CEQA for those projects over which a public agency exercises only ministerial approval; therefore, the District finds that this project to be exempt from the provisions of CEQA.

#### IX. Recommendation

Compliance with all applicable rules and regulations is expected. Therefore, issuance of Authority to Construct N-758-13-10 is recommended after addressing comments from the applicant and the EPA.

#### X, **Billing Information**

Permit #	Fee Schedule	Fee Description	Previous Fee Schedule
N-758-13-10	3020-01 C	63 hp	3020-01 C

# **Appendices**

Appendix I: Draft Authority to Construct Permit

Appendix II: Existing Permit to Operate
Appendix III: Risk Management Review Summary
Appendix IV: Compliance Certification Form

Appendix V: Quarterly Net Emissions Change

Appendix I Draft Authority to Construct Permit

# San Joaquin Valley Air Pollution Control District

**AUTHORITY TO CONSTRUCT** 

PERMIT NO: N-758-13-10

LEGAL OWNER OR OPERATOR: EQUILON ENTERPRISES LLC

MAILING ADDRESS:

SHELL OIL PRODUCTS US ATTN: ENV COORD

ISSU

2555 13TH AVENUE SW SEATTLE, WA 98134

LOCATION:

ROUGH & READY ISLAND STOCKTON, CA 95203

#### **EQUIPMENT DESCRIPTION:**

MODIFICATION OF ONE JOHN ZINK VAPOR RECOVERY SYSTEM, CARBON ADSORPTION UNIT, MODEL #AA1218715B AND VAPOR BLADDER TANK #16 IN THE VAPOR RECOVERY LINE BEFORE THE VAPOR RECOVERY SYSTEM: TO ADD A SPARE BLOWER, CONNECT OUTLET OF EACH CARBON CANISTER TO A COMMON EXHAUST, RECONFIGURE THE CMS PROBE INTO THE COMMON EXHAUST STACK

## CONDITIONS

- {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
- 3. No gasoline delivery vessel shall be operated or be allowed to operate unless valid State of California decals are displayed on the cargo container, which attest to the vapor integrity of the container. [District Rule 4621] Federally Enforceable Through Title V Permit
- 4. The vapor collection and control system shall operate such that the pressure in the delivery tank being loaded shall not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624] Federally Enforceable Through Title V Permit
- 5. The transfer rack and vapor collection equipment shall be maintained and operated such that there are no leaks and no excess organic liquid drainage at disconnections. [District Rule 4624] Federally Enforceable Through Title V Permit

#### CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Directory APCO

Arnaud Marjollet - Director of Permit Services
N-758-13-10 May 10 2016 14 48 AV - KAPRONJ : John Irapesson NOT Residue

- 6. The John Zink vapor processing unit shall have two operational carbon adsorption columns. Each column shall be regenerated every 15 minutes when the device is in operation. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. The vapors from the facility's fixed roof tanks and loading rack may bypass the bladder tank (Tank #16) only during periods of time when the bladder tank is down for maintenance, repairs, breakdowns, inspection of the bladder tank, or degassing of the bladder tank. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Fugitive VOC emissions from this unit shall not exceed 25.8 pounds per day or 9,415 pounds per year. Fugitive VOC emissions shall be calculated using appropriate emission factors from CAPCOA 's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities", Table IV-1b (Feb 1999) Marketing Terminal and actual component count associated with this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Vapor return hose(s) shall connect displaced vapors from the truck to the vapor control system whenever tank truck, trailer, or car is loading organic liquid. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
- 10. Vapor return hose(s) and connections between the tanker truck, trailer, or car and the vapor control system shall be leak-free. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
- 11. The facility shall be equipped with bottom loading and a vapor collection and control system such that the VOC emissions shall not exceed 0.08 pounds per 1,000 gallons of organic liquid loaded. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
- 12. The John Zink vapor processing unit is authorized to handle gasoline vapors from a total of no more than 895,000 gallons of gasoline throughput per day, nor 196,000,000 gallons of gasoline throughput in a 12 consecutive month rolling period. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
- 13. All trucks shall be bottom loaded (or submerge loaded) using dry break couplers. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
- 14. VOC control efficiency of the carbon adsorber system shall be at least 99% on weight basis [District Rules 2201 and 4102]
- 15. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
- 16. Source testing to demonstrate compliance with permit conditions and all rules and regulations, when the bladder tank is on-line, shall be conducted on an annual basis. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. Compliance with the VOC emissions limit shall be determined using 40 CFR 60.503 "Test Methods and Procedures" and EPA Methods 2A, 2B, 25A and 25B and ARB Method 422, or ARB Test Procedure TP-203.1. [District Rule 4624] Federally Enforceable Through Title V Permit
- 19. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
- 20. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 21. The owner or operator shall calibrate, certify, and maintain, and quality-assure a Continuous Monitoring System (CMS) which continuously measures and records the VOCs (and other parameters, if any, to determine compliance with lb-VOC/1,000 gallon of organic liquid) while gasoline vapors are displaced to the John Zink carbon adsorption system. [District Rule 1080 and 40 CFR 63.11092(b)] Federally Enforceable Through Title V Permit
- 22. The CMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080] Federally Entercable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

- 23. The CMS shall meet the requirements in 40 CFR 60 Appendix B Performance Specification 8 (PS 8) or 8A (PS 8), as appropriate, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
- 24. The CMS must be audited at least once every six months by conducting cylinder gas audits (CGA) using the procedure in 40 CFR Part 60 Appendix F, 5.1.2. Audit reports shall be submitted along with semi-annual compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- 25. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
- 26. The CMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
- 27. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- 28. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rule 1080] Federally Enforceable Through Title V Permit
- 29. The owner or operator shall submit a written report of CMS operations on semi-annual basis to the District. The report shall include the following: Date, time intervals, data and magnitude of excess emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CMS was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit
- 30. A leak is defined as the dripping of VOC-containing liquid at a rate of more than 3 drops per minute, or the detection of any gaseous or vapor emissions with a concentration of VOC greater than 10,000 ppmv as methane above a background when measured using a portable hydrocarbon detection instrument in accordance with EPA Method 21. [District Rule 4624] Federally Enforceable Through Title V Permit
- 31. Excess organic liquid drainage is defined as an average of more than 10 milliliters liquid drainage per disconnect from three consecutive disconnects. [District Rule 4624] Federally Enforceable Through Title V Permit
- 32. The operator shall inspect the vapor collection system, the vapor disposal system, and each transfer rack handling organic liquids for leaks during transfer at least once every calendar quarter using the EPA Method 21. [District Rule 4624] Federally Enforceable Through Title V Permit
- 33. All leaking components shall be repaired or replaced within 72 hours of discovery. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624] Federally Enforceable Through Title V Permit
- 34. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually provided no leaks were found during five consecutive quarterly inspections. Upon identification of any leak during an annual inspection, the inspection frequency shall revert back to quarterly, and the operator shall contact the APCO in writing within 14 days. [District Rule 4624] Federally Enforceable Through Title V Permit
- 35. Each activated carbon adsorption column shall be equipped with an operational pressure differential gauge. The optimum pressure for each column shall be determined after source testing. [District Rule 4624] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

- 36. The permittee shall maintain records of all maintenance, repair, breakdown, tank inspection and testing, and degassing of the bladder tank events when the vapors are not first sent to the bladder tank and are sent directly to the John Zink vapor processing unit. These records shall indicate the times, dates and reasons why the bladder tank was off-line. [District Rule 2201] Federally Enforceable Through Title V Permit
- 37. The permittee shall maintain records of the daily, monthly, 12-month total gasoline throughput, in gallons, and results of required leak inspections. These records shall be retained for a minimum of five years and shall be made available for District inspection upon request. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit



Appendix II Existing Permit to Operate

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT: N-758-13-9** 

EXPIRATION DATE: 01/31/2017

#### **EQUIPMENT DESCRIPTION:**

ONE JOHN ZINK VAPOR RECOVERY SYSTEM, CARBON ADSORPTION UNIT, MODEL #AA1218715B AND VAPOR BLADDER TANK #16 IN THE VAPOR RECOVERY LINE BEFORE THE VAPOR RECOVERY SYSTEM.

## PERMIT UNIT REQUIREMENTS

- 1. No gasoline delivery vessel shall be operated or be allowed to operate unless valid State of California decals are displayed on the cargo container, which attest to the vapor integrity of the container. [District Rule 4621] Federally Enforceable Through Title V Permit
- The vapor collection and control system shall operate such that the pressure in the delivery tank being loaded shall not
  exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624] Federally
  Enforceable Through Title V Permit
- 3. The transfer rack and vapor collection equipment shall be maintained and operated such that there are no leaks and no excess organic liquid drainage at disconnections. [District Rule 4624] Federally Enforceable Through Title V Permit
- 4. The John Zink vapor processing unit shall have two operational carbon adsorption columns. Each column shall be regenerated every 15 minutes when the device is in operation. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The vapors from the facility's fixed roof tanks and loading rack may bypass the bladder tank (Tank #16) only during periods of time when the bladder tank is down for maintenance, repairs, breakdowns, inspection of the bladder tank, or degassing of the bladder tank. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Fugitive VOC emissions from this unit shall not exceed 9,362 lb-VOC/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Vapor return hose(s) shall connect displaced vapors from the truck to the vapor control system whenever tank truck, trailer, or car is loading organic liquid. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
- 8. Vapor return hose(s) and connections between the tanker truck, trailer, or car and the vapor control system shall be leak-free. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
- 9. The facility shall be equipped with bottom loading and a vapor collection and control system such that the VOC emissions shall not exceed 0.08 pounds per 1,000 gallons of organic liquid loaded. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
- 10. The John Zink vapor processing unit is authorized to handle gasoline vapors from a total of no more than 895,000 gallons of gasoline throughput per day, nor 196,000,000 gallons of gasoline throughput in a 12 consecutive month rolling period. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
- 11. All trucks shall be bottom loaded (or submerge loaded) using dry break couplers. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
- 12. VOC control efficiency of the carbon adsorber system shall be at least 99% on weight basis [District Rules 2201 and 4102]
- 13. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: EQUILON ENTERPRISES LLC
Location: ROUGH & READY ISLAND, STOCKTON, CA 95203
N-756-13-9 May 10 2016 11 40AM -- KANLONN

- 14. Source testing to demonstrate compliance with permit conditions and all rules and regulations, when the bladder tank is on-line, shall be conducted on an annual basis. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 16. Compliance with the VOC emissions limit shall be determined using 40 CFR 60.503 "Test Methods and Procedures" and EPA Methods 2A, 2B, 25A and 25B and ARB Method 422, or ARB Test Procedure TP-203.1. [District Rule 4624] Federally Enforceable Through Title V Permit
- 17. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 19. The owner or operator shall calibrate, certify, and maintain, and quality-assure a Continuous Monitoring System (CMS) which continuously measures and records the VOCs (and other parameters, if any, to determine compliance with lb-VOC/1,000 gallon of organic liquid) while gasoline vapors are displaced to the John Zink carbon adsorption system. [District Rule 1080 and 40 CFR 63.11092(b)] Federally Enforceable Through Title V Permit
- 20. The CMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
- 21. The CMS shall meet the requirements in 40 CFR 60 Appendix B Performance Specification 8 (PS 8) or 8A (PS 8), as appropriate, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
- 22. The CMS must be audited at least once every six months by conducting cylinder gas audits (CGA) using the procedure in 40 CFR Part 60 Appendix F, 5.1.2. Audit reports shall be submitted along with semi-annual compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- 23. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
- 24. The CMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
- 25. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- 26. The permittee shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rule 1080] Federally Enforceable Through Title V Permit
- 27. The owner or operator shall submit a written report of CMS operations on semi-annual basis to the District. The report shall include the following: Date, time intervals, data and magnitude of excess emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CMS was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit

- 28. A leak is defined as the dripping of VOC-containing liquid at a rate of more than 3 drops per minute, or the detection of any gaseous or vapor emissions with a concentration of VOC greater than 10,000 ppmv as methane above a background when measured using a portable hydrocarbon detection instrument in accordance with EPA Method 21. [District Rule 4624] Federally Enforceable Through Title V Permit
- 29. Excess organic liquid drainage is defined as an average of more than 10 milliliters liquid drainage per disconnect from three consecutive disconnects. [District Rule 4624] Federally Enforceable Through Title V Permit
- 30. The operator shall inspect the vapor collection system, the vapor disposal system, and each transfer rack handling organic liquids for leaks during transfer at least once every calendar quarter using the EPA Method 21. [District Rule 4624] Federally Enforceable Through Title V Permit
- 31. All leaking components shall be repaired or replaced within 72 hours of discovery. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624] Federally Enforceable Through Title V Permit
- 32. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually provided no leaks were found during five consecutive quarterly inspections. Upon identification of any leak during an annual inspection, the inspection frequency shall revert back to quarterly, and the operator shall contact the APCO in writing within 14 days. [District Rule 4624] Federally Enforceable Through Title V Permit
- 33. Each activated carbon adsorption column shall be equipped with an operational pressure differential gauge. The optimum pressure for each column shall be determined after source testing. [District Rule 4624] Federally Enforceable Through Title V Permit
- 34. The permittee shall maintain records of all maintenance, repair, breakdown, tank inspection and testing, and degassing of the bladder tank events when the vapors are not first sent to the bladder tank and are sent directly to the John Zink vapor processing unit. These records shall indicate the times, dates and reasons why the bladder tank was off-line. [District Rule 2201] Federally Enforceable Through Title V Permit
- 35. The permittee shall maintain records of the daily, monthly, 12-month total gasoline throughput, in gallons, and results of required leak inspections. These records shall be retained for a minimum of five years and shall be made available for District inspection upon request. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit

Appendix III Risk Management Review Summary

# San Joaquin Valley Air Pollution Control District Risk Management Review

To:

Jag Kahlon - Permit Services

From:

Tadeh Issakhanian - Technical Services

Date:

May 9, 2016

Facility Name:

Equilon Enterprises LLC

Location:

3515 Navy Dr. Stockton

Application #(s):

N-758-13-10

Project #:

N-1161376

#### A. RMR SUMMARY

RMR Summary						
Categories	Vapor Recovery (Unit 13-10)	Project Totals	Facility Totals			
Prioritization Score	0.04	<1.0	>1.0			
Acute Hazard Index	0.00	0.00	0.00			
Chronic Hazard Index	0.00	0.00	0.00			
Maximum Individual Cancer Risk	1.20E-08	1.20E-08	4.29E-08			
T-BACT Required?	No	Avissionas Alemania				
Special Permit Requirements?	No					

#### B. RMR REPORT

#### I. Project Description

Technical Services received a request on April, 28 2016, to perform a Risk Management Review for a proposed modification to a vapor recovery system consisting of a bladder tank vented to a carbon absorber. The modification consisted of 1)Installing a spare blower motor to the carbon absorber system, 2)Connect the outlet of each carbon canister to a common exhaust, 3)Reconfigure continuous monitoring system (CMS) sampling probes at the outlet of each carbon column to a single sample probe into the common exhaust stack.

#### II. Analysis

Toxic emissions from Oilfield Fugitives were calculated using emission factors derived from 1991 source tests of central valley sites, and input into the San Joaquin Valley APCD's Hazard Assessment and Reporting Program (SHARP). In accordance with the District's Risk Management Policy for Permitting New and Modified Sources (APR 1905, May 28, 2015), risks from the proposed unit's toxic emissions were prioritized using the procedure in

the 1990 CAPCOA Facility Prioritization Guidelines. The prioritization score for the facility is greater than 1.0 (see RMR Summary Table). Therefore, a refined health risk assessment was required. The AERMOD model was used, with the parameters outlined below and meteorological data for 2010-2014 from Stockton to determine the dispersion factors (i.e., the predicted concentration or X divided by the normalized source strength or Q) for a receptor grid. These dispersion factors were input into the SHARP Program, which then used the Air Dispersion Modeling and Risk Tool (ADMRT) of the Hot Spots Analysis and Reporting Program Version 2 (HARP 2) to calculate the chronic and acute hazard indices and the carcinogenic risk for the project.

The following parameters were used for the review:

Analysis Parameters Unit 13-10					
Source Type	Point	Location Type	Urban		
Stack Height (m)	6.4	Closest Receptor (m)	61		
Stack Diameter. (m)	0,10	Type of Receptor	Residential		
Stack Exit Velocity (m/s)	17.5	Fugitive (VOC/hr)	0.006		
Stack Exit Temp. (°K)	297	Fugitive (VOC/hr)	53		

#### III. Conclusion

The acute and chronic indices are below 1.0 and the cancer risk factor associated with the project is less than 1.0 in a million. In accordance with the District's Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).

These conclusions are based on the data provided by the applicant and the project engineer. Therefore, this analysis is valid only as long as the proposed data and parameters do not change.

#### IV. Attachments

- A. RMR request from the project engineer
- B. Additional information from the applicant/project engineer
- C. Prioritization score w/ toxic emissions summary
- D. Facility Summary

Appendix IV Compliance Certification Form

# San Joaquin Valley Unified Air Pollution Control District

# TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I.	TYPE OF PERMIT ACTION (Check ap	propriate	box)		
[ ] [X]	SIGNIFICANT PERMIT MODIFICATION MINOR PERMIT MODIFICATION	[]	ADMINISTRATIVE AMENDMENT		
1 incomessance	MPANY NAME; Equilon Enterprises, LLC di		· ·	FACILITY ID: N- 758	
1.	Type of Organization:[X] Corporation [ ] Sole O	wnership	[] Government []P	artnership [ ] Utility	
2.	Owner's Name;				
3,	Agent to the Owner:	*****************			
II.	COMPLIANCE CERTIFICATION (Read each	statement	carefully and initial all	circles for confirmation):	
	Based on information and belief formed after continue to comply with the applicable feder	r reasonab al require	le inquiry, the equipment ment(s).	at identified in this application will	
	Based on information and belief formed after compily with applicable federal requirement(	r reasonab s) that wil	le inquiry, the equipment become effective durin	nt identified in this application will g the permit term, on a timely basis	
	Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.				
	Based on information and belief formed after application package, including all accompanion complete.	r reasonat ying repo	de inquiry, information a ts, and required certifica	and statements in the submitted ations are true accurate and	
1 đơ	eclare, under penalty of perjury under the laws of the	e state of	California, that the forge	oing is correct and true:	
1	1 the		3/31	1,,	
Si	gnature of Responsible Official	······································	Date	manufactura a contra manufactura de contra de	
	rnest Haynes				
N	ame of Responsible Official (please print)	D===(			
F	acilities Manager				
Ti	tle of Responsible Official (picase print)	-curity			

Mailing Address: Central Regional Office \* 1990 E. Geltysburg Avenue \* Fresuo, California 93726-0244 \* (559) 230-5900 \* FAX (559) 230-6061

TVFORM-060

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Appendix V Quarterly Net Emissions Change (QNEC)

## Quarterly Net Emissions Change (QNEC)

The Quarterly Net Emissions Change is used to complete the emission profile screen for the District's PAS database. The QNEC shall be calculated as follows:

QNEC = PE2 - PE1, where:

QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr.

PE2 = Post Project Potential to Emit for each emissions unit, lb/qtr.

PE1 = Pre-Project Potential to Emit for each emissions unit, lb/qtr.

## N-758-13-10:

Using the values in Sections VII.C.1 and VII.C.2 in the evaluation above, quarterly PE2 and quarterly PE1 can be calculated as follows:

PE2<sub>quarterly</sub> = PE2<sub>annual</sub> + 4 quarters/year

= 25,095 lb/year + 4 qtr/year

= 6,273.75 lb-VOC/qtr

PE1<sub>quarterly</sub> = PE1<sub>annual</sub> + 4 quarters/year

= 25,042 lb/year ÷ 4 gtr/year

= 6,260.50 lb-VOC/gtr

Quarterly NEC [QNEC]						
	PE2 (lb/qtr)	PE1 (lb/qtr)	QNEC (lb/qtr)			
NOx	0	0	0			
SO <sub>X</sub>	0	0	0			
PM <sub>10</sub>	0	0	0			
CO	0	0	0			
VOC	6,273.75	6,260.50	13.25			